

THERE IS CLAIMED:

1. A monolithic integrated optical component including a control transistor connected to an electro-optical component including an active waveguide and at least one input waveguide and one output waveguide, in which component said transistor is a heterojunction bipolar transistor including at least one sub-collector layer that is common to a confinement layer of said electro-optical component, and said active waveguide of said electro-optical component includes a widened structure under a contact area of said heterojunction bipolar transistor and having substantially the same surface area as said transistor.
2. The optical component claimed in claim 1 wherein said widened structure of said active waveguide is lengthened in such a manner as to constitute a multimode interference coupler.
3. The optical component claimed in claim 2 wherein said multimode interference coupler has one input waveguide and one output waveguide.
4. The optical component claimed in claim 2 wherein said multimode interference coupler has N input waveguides and N output waveguides.
5. The optical component claimed in claim 1 wherein said electro-optical component is a modulator.
6. The optical component claimed in claim 1 wherein said electro-optical component is a laser source.
7. The optical component claimed in claim 1 wherein said electro-optical component is a photodiode.
8. The optical component claimed in claim 1 wherein said electro-optical component is a semiconductor optical amplifier.